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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------------|
| 10/791,932 | 03/03/2004 | William Stephen Kosh | 15826-204001 / II-01-001 | 4141 |
| 26231 7590 02/06/2008 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | EXAMINER RAEVIS, ROBERT R | |
| | | | ART UNIT 2856 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/791,932

Applicant(s)

KOSH ET AL.

Examiner

Robert R. Raevis

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-14 and 25-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/06, 8/05, 6/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "cylindrical" (claims 26,27) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 12-14,25-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 12, are the “pressure differential generating module” (line 4) and “portable flow accelerator” (line 6) further limitations of the “handheld measurement module” (line 2), or are they separate? The indentations on lines 4 and 5 suggest that they are further limitations, but the claim lacks a – further including—phrase (i.e. line 3 does not state – input and low pressure input, the measurement module further including: --) suggestive that they may be separate from the “pressure generating module”. Note that such phrase (“accelerator further including”, lines 10-11) is employed to clearly define the “accelerator”, and that the claim also employs indentations on lines 12 and 15; but the “further including” phrase is lacking when relating the “measurement module” (line 2) to the “generating module” (line 4) and “portable flow accelerator” (line 7). As a result, it’s unclear how far the “handheld” (line 2) feature goes (i.e. does it extend to the structure on lines 4+)? (If so, where might there even be support for such?) Finally, “low” (line 3 from the bottom of the claim) should read – high --.

Claims 12,13,14,25,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sagi et al.

Sagi et al teaches a system, including (Figure 1): “handheld” (col. 3, line 52) “unit” having a differential sensor 86,88 with high pressure input 82 and low pressure

input 84; pressure generating "element" associated with the handheld measurement unit, the generating element including: accelerator section with sloping portion 56, taps for fluid connection to the handheld unit, and a source of gas pressure to drive gas through the generator.

Sagi does not state what the source of gas is, and does not identify unit and element as modules.

As to claims 12,25,28, it would have been obvious to employ a pump as a gas source, as systems with pumps employ gas sensors to register (and even control) flow rates. It would have been obvious to releasably connect the unit and element together as they must be connected together to function. In addition, please note that the claim is directed to combination of structural limitation after the term "comprising" (line 1 of claim 12), and that the preamble merely lends itself to an intended use.

As to claims 13,14, flowmeters are connected both upstream and downstream of pumps to both register (and even control) flow rates.

Claims 27,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sagi et al as applied to claim 25 above, and further in view of Wickert et al.

As to claims 27,26, Wickert et al teach use of a cylindrical section between ports 14,18 to provide for accurate flow rate measuring, suggestive of use of same in Sagi.

Claims 29,30,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sagi et al in view of Nordhofen.

As to claim 29, Nordhofen teaches use of "rectangular" (col. 2, line 45) shaped throttle devices to accurately measure flow, suggestive of such shape in Sagi.

As to claims 30,31, the A/A ratio in the Figure of Nordhofen is well over 12.5, suggestive of application of such a ratio to measure flow.

Claims 29,30,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sagi et al in view of Nordhofen and Wickert et al.

As to claim 33, the A/A ration in Figure 1 of Wicker is about 5+, while that of Nordhofen is over 12.5, suggestive of application of values there between to measure flow.

Claims 1,13,14,25,28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10,12,13,1,1 of U.S. Patent No. 7,111,491 in view of either Sagi et al or Wickert et al.

As to claims 1,13,14,25,28, it would have been obvious to employ a sloping portion as Patent claim 10's accelerometer, as either Sagi or Wickert teach use of sloping bodies to provide for differential pressure generators.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McGoldrick et al teach (Figure 1) handheld size pressure calibration devices.

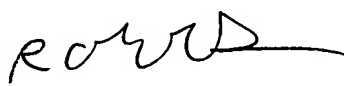
Lawford calibrates a differential pressure measuring apparatus.

Friend et al teach a handheld unit comprising a switch (module) and pressure generator (module) connected together by tiny screws 23.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raemis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RAEMIS